

### **REMARKS**

Applicants respectfully request reconsideration of the present application, as amended.

#### **I. STATUS OF THE CLAIMS**

Claims 1-57 are pending in this application. Claims 28, 29 and 34-57 have been withdrawn from consideration. Claims 1, 22, 24 and 31 have been amended to more particularly point out and distinctly claim that which Applicants regard as their invention. In particular, Claims 1 and 31 have been amended herewith to further clarify that "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines.". Moreover, claim 4 has been canceled without prejudice.

Support for the above amendments may be found throughout the specification as originally filed. No new matter has been added by virtue of this amendment.

#### **II. CLAIM OBJECTIONS**

Claims 22 and 24 were objected to because of certain informalities.

In response, claim 22 has been amended to now depend from claim 20.

In addition, claim 24 has been amended to provide proper antecedent basis for the plurality of fourth and fifth contact holes.

In view of the above actions, taken it is respectfully submitted that the above objections have been obviated.

### III. 35 U.S.C. 102(b) & 35 U.S.C. 102(e) REJECTIONS

(i) Claims 1-3, 5-19, 21, 27 and 30 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,172,729 B1 to Ikeda ("hereinafter referred to as "Ikeda").

It is respectfully asserted that Ikeda fails to teach or suggest all of the features recited in claim 1.

As noted above, claim 1 has been amended to further clarify that "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines."

The Ikeda patent at the very least fails to teach or suggest a thin film transistor for a liquid crystal display, wherein "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines.", as recited in claim 1. The above assertion of the patentability of amended claim 1 over the Ikeda reference is further supported by the fact that all of the above-mentioned features amended into claim 1 originate from prior claim 4. Moreover, claim 4 was not rejected in view of the Ikeda patent in the instant Office Action. Thus, Ikeda fails to anticipate amended claim 1.

For the reasons set forth above, withdrawal of the above rejections to claim 1 is respectfully requested. As claims 2, 5-19, 21, 27 and 30 depend from and incorporate all of the limitations of claim 1, withdrawal of the rejections to these dependent claims is likewise requested.

**(ii) Claims 1-11, 16, 18-19 and 30 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No.2004/0201811 to Jun ("hereinafter referred to as "Jun").**

In response, it is submitted that Jun does not qualify as prior art with respect to any of the pending claims, including those claims rejected above. Namely, the effective filing date of Jun for 35 U.S.C. 102(e) purposes is after the foreign priority date claimed under 35 U.S.C 119 by the present application to Korean Patent Application No. 2003-0021313. Specifically, the effective 102(e) filing date of Jun is August 14, 2003, whereas the priority date claimed by the present application is April 4, 2003. (Korean Patent Application No. 2003-0021313). Thus, Jun is clearly not prior art with respect to any of the pending claims of the present application, including those claims rejected above.

In this regard, pursuant to **MPEP 201.15**, enclosed herewith for the purposes of overcoming the effective date of Jun is an English translation of the certified copy of the above Korean priority application, together with a statement that the translation of the certified copy of this priority application is accurate.

Therefore, for the reasons set forth above, Jun does not constitute prior art and thus cannot be relied upon to support the current claim rejections under 35 U.S.C. 102(e). Accordingly, the claim rejections under 35 U.S.C. 102(e) are legally deficient on their face and, consequently, must be withdrawn.

**(iii) Claims 1-3, 5-19, 21 and 30 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,710,836 B2 to Lee ("hereinafter referred to as "Lee").**

It is respectfully asserted that Lee fails to teach or suggest all of the features recited in claim 1.

The Lee patent at the very least fails to teach or suggest a thin film transistor for a liquid crystal display, wherein "each of the plurality of data lines comprise a first set of oblique

portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines.", as recited in claim 1. As discussed above, all of the above-mentioned features amended into claim 1 originate from prior claim 4. As claim 4 was not rejected in view of the Lee patent in the instant Office Action, the Lee patent fails to anticipate amended claim 1.

Therefore, withdrawal of the above rejections to claim 1 is respectfully requested. As claims 2, 5-19, 21 and 30 depend from and incorporate all of the limitations of claim 1, withdrawal of the rejections to these dependent claims is likewise requested.

#### IV. 35 U.S.C. 103(a) REJECTIONS

(i) Claims 20 and 22-25 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda as applied above to claims 1-3 and 5-19, and further in view of U.S. Patent No. 6,861,368 B2 to Chae ("the Chae patent").

As mentioned above, the Ikeda patent at the very least fails to teach or suggest a thin film transistor for a liquid crystal display, wherein "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines.", as recited in claim 1. As claims 20 and 22-25 depend from and incorporate all of the limitations of claim 1, these dependent claims are likewise patentable over the Ikeda reference.

Moreover, the Chae reference fails to cure the above deficiencies of Ikeda because Chae also fails to teach or suggest a thin film transistor for a liquid crystal display, wherein "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines."

Therefore, for at least the reasons set forth above, withdrawal of the above rejections to claims 20 and 22-25 is respectfully requested.

**(ii) Claims 20 and 22-25 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Jun as applied above to claims 1-11, 16 and 18-19 and further in view of Chae.**

In response, it is submitted that the above rejection must be withdrawn because, as discussed above, the Jun reference does not qualify as prior art. In particular, the effective filing date of Jun for 35 U.S.C. 102(e) purposes is after the foreign priority date claimed under 35 U.S.C 119 by the present application to Korean Patent Application No. 2003-0021313.

Accordingly, the claim rejections under 35 U.S.C. 103(a) are legally deficient on their face and, consequently, must be withdrawn.

**(iii) Claims 20 and 22-25 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied above to claims 1-3, 5-19 and 21 and further in view of Chae.**

As discussed, the Lee patent at the very least fails to teach or suggest a thin film transistor for a liquid crystal display, wherein “each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines.”, as recited in claim 1. As claims 20 and 22-25 depend from and incorporate all of the limitations of claim 1, these dependent claims are likewise patentable over the Lee reference.

Moreover, the Chae reference fails to cure the above deficiencies of Lee because Chae also fails to teach or suggest a thin film transistor for a liquid crystal display, wherein “each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique

portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines.”

Therefore, for at least the reasons set forth above, withdrawal of the above rejections to claims 20 and 22-25 is respectfully requested.

**(iv) Claim 26 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda as applied above to claims 1-3, 5-19 and 21 and further in view of U.S. Patent Application Publication No. 20030133055A1 to Um et al. (“the Um publication”).**

In response, it is respectfully asserted that pursuant to MPEP 706.02 (I) (1) and 706.02 (I) (2), the Um publication cannot be used as prior art against any of the pending claims of the present application, including rejected claim 26.

Specifically, the Um publication was cited as a 35 U.S.C. 102(e) reference. However, the present application and the Um publication were, at the time the invention of the present application was made, owned by the same entity, Samsung Electronics Co., Ltd. This statement alone is sufficient to disqualify the Um publication from being used in a rejection under 35 U.S.C. 103(a) against the claims of the present application.

Therefore, the amended provision 103(c) is applicable and the Examiner cannot rely on the Um publication to support the current claim rejections under 35 U.S.C. 103(a). Accordingly, the claims rejections under 35 U.S.C. 103(a) *are legally deficient on their face and, consequently must be withdrawn.*

**(v) Claim 26 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied above to claims 1-3, 5-19 and 21 and further in view of Um.**

In response, it is submitted that the above rejection must be withdrawn because, as discussed above, the Um publication does not qualify as prior art. In particular, the present

application and the Um publication were, at the time the invention of the present application was made, owned by the same entity, Samsung Electronics Co., Ltd.

Accordingly, the claim rejections under 35 U.S.C. 103(a) are legally deficient on their face and, consequently, must be withdrawn.

**(vi) Claim 31-33 have been rejected under 35. U.S.C. 103(a) as being unpatentable over Ikeda in view of U.S. Patent No. 5,626,796 to Tusujimura et al. ("the Tusujimura patent").**

As noted above, claim 31 has been amended to further clarify that "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines."

Further, as discussed with regard to claim 1, the Ikeda patent at the very least fails to teach or suggest a thin film transistor for a liquid crystal display, wherein "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines."

Claim 31 is thus patentable over the Ikeda reference for at least the reason set forth above. Further, as claim 33 depends from and incorporates all of the limitations of claim 31, this dependent claim is also patentable over the Ikeda reference. In addition, claim 32 is likewise patentable over the Ikeda reference as it depends from and incorporates all of the limitations of claim 1.

Moreover, the Tusujimura reference fails to cure the above deficiencies of Ikeda because Tusujimura also fails to teach or suggest a thin film transistor for a liquid crystal display,

wherein "each of the plurality of data lines comprise a first set of oblique portions and a second set of oblique portions, the first set of oblique portions being angled counterclockwise by about 45° from the plurality of gate lines and the second set of oblique portions being angled clockwise by about 45° from the plurality of gate lines."


Therefore, for at least the reasons set forth above, withdrawal of the above rejections to claims 31-33 is respectfully requested.

**VI. CONCLUSION**

For the foregoing reasons, applicants respectfully submit that the instant application is in condition for allowance. Early notice to that end is earnestly solicited.

If a telephone conference would be of assistance in furthering prosecution of the subject application, applicants request that the undersigned be contacted at the number below.

Respectfully submitted,

  
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